The Fiscal Problem of the 21st Century
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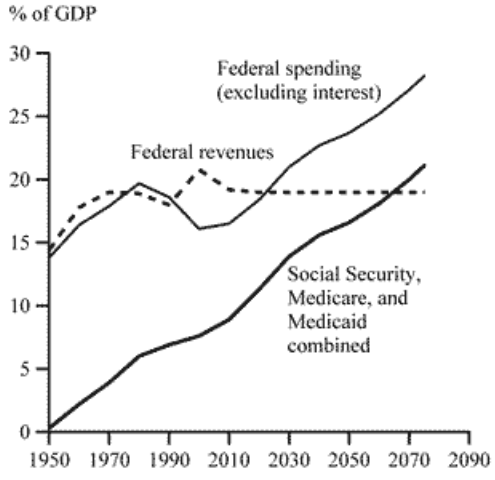
Last year, the Congressional Budget Office (CBO) released a remarkable report entitled *A 125-Year Picture of the Federal Government's Share of the Economy, 1950 to 2075*. This report projects the future of government spending as a share of GDP assuming current policies remain in place, and the projections put forward are stunning: while the share has averaged about 19% since 1950, it is projected to rise drastically in coming decades, more than doubling to 39.7% by 2075. With no change in tax policies, this rise in spending implies exploding budget deficits, reaching 20% of GDP by 2075.

The inescapable implication of this report is that our current policies are unsustainable, and something will have to change. This *Economic Letter* explains the nature of this fiscal problem and provides some perspective on how it might be resolved.

The fiscal problem

Figures 1 and 2 summarize the forecasts in the CBO's report. For the period 1950 to 2000, the figures plot actual numbers for the U.S. economy. For the period 2010 to 2075, the figures plot CBO projections under the assumption that current policies continue. In general, the projections are based on reasonable assumptions for the future path of wages, the number of recipients of various entitlement programs, and spending per recipient.

Figure 1: Total spending, entitlement spending, and revenues, 1950 to 2075



Source: CBO (2002a) Tables 2 and 3.
Note: Actual data until 2000, CBO forecasts afterward.

Figure 1 graphs several statistics related to this fiscal problem. The first is total federal spending, excluding interest on the debt, as a fraction of GDP. The CBO projection quoted at the start of this *Letter* referred to a spending share that rose to nearly 40%. What Figure 1 implies is that about 10 percentage points of this total consists of interest on the debt, under the assumption that tax revenues as a share of GDP do not rise with spending. The rise in non-interest spending is more modest, but still quite significant: by 2075, revenues would need to rise by about 9 percentage points of GDP to cover non-interest spending.

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Figure 1 also shows the main change accounting for the rise in government spending: federal spending on three entitlement programs—Social Security, Medicare, and Medicaid. This entitlement spending has risen from 0.3% of GDP in 1950 to 7.6% in 2000. Total federal spending has averaged about 19% of GDP over this period, so spending on health and retirement has gone from a negligible fraction to more than a third of the total.

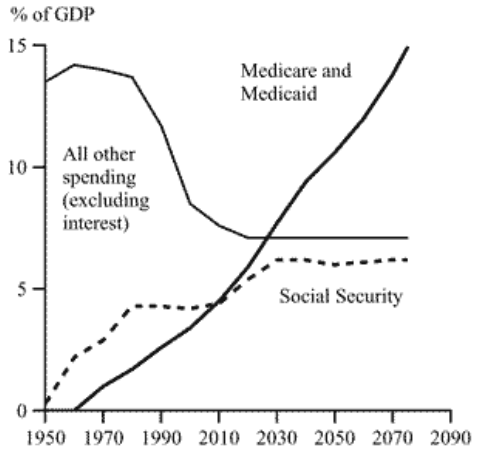
What are the reasons for this increase? One is the increased generosity of these entitlement programs, and another is the larger fraction of the U.S. population that will be eligible for these benefits because of the general aging of the U.S. population. For example, in 1940 there were 8.6 people of working age for every person aged 65 and above; by 2000, this number had fallen by nearly half to 4.7 (CBO 2002b).

What is even more remarkable about federal spending on health and retirement, however, is the continuation of the trend in the CBO's projections. As shown in Figure 1, under the assumption that current policies continue, the fraction of GDP devoted to entitlement spending on these programs will rise from 7.6% in 2000 to 13.9% in 2030 and to 21.1% by 2075. This increase is driven by the continued aging of the U.S. population: the ratio of working-age population to the population aged 65 and over is expected to fall from 4.7 in 2000 to 2.8 in 2030 and to 2.4 in 2075.

To put the rise of this entitlement spending in perspective, Figure 1 also plots federal revenues as a percentage of GDP. Like total federal spending, federal revenues have averaged about 18% or 19% of GDP since 1950. Assuming current policies continue, the CBO projections assume that revenues stabilize at 19% of GDP in the future. When entitlement spending was low, this left ample room for additional spending on defense, unemployment insurance, environmental protection, and federally funded research, among other things. However, according to the CBO projection, health and retirement spending by itself will exceed 19% of GDP by 2070 if current policies continue.

Figure 2 breaks down the projections for the entitlement programs into health care costs and Social Security. The CBO projects Social Security expenditures to rise from 4.2% of GDP in 2000 to 6.2% in 2030, and then to level off. In contrast, spending on Medicare and Medicaid rises from 3.4% of GDP in 2000 to 7.7% of GDP in 2030 and then to 14.9% of GDP by 2075. A primary cause of this increase in the projections is an underlying assumption that health care costs per recipient will grow at a rate that is 1 percentage point faster than the rate of per capita GDP growth. While this rate may appear to be high, it is, in fact, slower than the rate of growth in health costs in recent decades.

Figure 2: Components of federal expenditures, 1950 to 2075



Source: CBO (2002a) Table 2.
Note: Actual data until 2000, CBO forecasts afterward.

An alternative perspective

Another way to look at the problem is presented in Hall (2003), who analyzes from the standpoint of the typical household in the United States. He imagines a statistical household consisting of one man and one woman, earning the typical amount of income over a typical lifetime and facing the typical health, retirement, and education expenses. Hall then computes the fraction of this household's pre-retirement resources that must be devoted to each of these spending categories. An important component of Hall's analysis is that he looks through the veil of who actually does the spending: all expenditures on behalf of a given household, whether paid for by the government or by an insurance company or by the household itself, are incorporated into the calculation.

According to Hall's analysis, a household that entered adulthood in 1960—that is, people now in their mid-60s—will have devoted about 30% of their pre-retirement resources to health, retirement, and education, with 16% going to health, 8% to education, and 6% to retirement. The 30% devoted to health is a substantial fraction, but it pales in comparison to the expenditures that are projected for future generations.

For example, consider a household entering adulthood in 2001. This household, according to Hall's projections, can expect to spend a total of 52% of its pre-retirement resources—35% on health, 14% on education, and 3% on retirement. (The reason the fraction of pre-retirement resources going to retirement is smaller than for the earlier generation is that high medical and education expenditures limit consumption, so that the modest labor income received by a typical retired couple is enough to finance most of its consumption.)

The projections for the generation born in 2003 and reaching adulthood in 2025 are even more dire. This household could expect to spend 56% of pre-retirement resources on health and 18% on education, so that nearly 75% of pre-retirement resources are devoted to these two categories.

Hall interprets these results as suggesting that existing institutions, designed to finance health, education, and retirement expenditures equal to about 30% of a household's pre-retirement resources, are likely to come under severe strain when asked to transfer more than twice this amount for future generations. One of the key institutions doing these transfers, of course, is the federal government.

Implications

The fiscal problem of the 21st century, then, is this: Under current policies, the fraction of resources society devotes to health care appears likely to rise substantially over the next 50 years. Reasonable projections suggest that spending on Medicare and Medicaid as a percentage of GDP may well rise from 3.4% in 2000 to nearly 15% by 2075.

It is far from clear how our existing institutions can deal with this projected increase. Tax revenue as a share of GDP has averaged around 18% since 1950, and a rise to 25% or

more by 2050 is one option. Alternatively, the current policies governing the Medicare, Medicaid, and, to a lesser extent, Social Security programs may be forced to change.

At the moment, existing economic research does not offer clear guidance as to which of these alternatives is more desirable, or whether some other alternative is better. In recent decades, society has reaped enormous gains from its health spending. In the United States in 1950, life expectancy at birth was 68.2 years, and by 1990 it was up to 75.4 years. Standard economic analysis suggests that the economic value of these gains in life expectancy far exceed the cost in terms of health expenditures (for example, see Jones 2001). If similar returns to future spending could be expected, perhaps the projected rise in federal health spending is desirable, and a substantial change in taxes as a share of GDP will be needed. Alternatively, of course, perhaps Medicare and Medicaid will need to be reformed to bring projected spending back in line with a lower tax share. A goal of future research is to help clarify the difficult decisions that society will face in coming decades.

References

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